Amendments to the Specification

- The foregoing and other features and advantages of the present invention will be apparent from the following, more particular description of a preferred embodiment of the invention, as illustrated in the accompanying drawings in drawing which[[:]] is a schematic block diagram of the system of the present invention for supplying amino acids in liquid form to ruminant livestock.
- [0013] FIG. 1 is a schematic block diagram of the system of the present invention for supplying amino acids in liquid form to ruminant livestock.
- [0015] One aspect of this invention is a system for administering amino acids in a liquid mixture to ruminant livestock. The administration is through a liquid such as the animals' drinking water, milk replacers, or liquid feed after the amino acid is diluted in the liquid. The dilution occurs immediately, since it is a matter of hydrosoluble products, and the relatively low percentage of inclusion in the drinking water or other liquid necessary for obtaining useful dosages prevents potential chemical incompatibility problems between the various amino acids, and does not affect the palatability of the liquid itself. The percentage of inclusion of the amino acid in the liquid may be from about 0.01% to about 10.0%. In a more preferred embodiment, the percentage of inclusion of the amino acid in the liquid may be from about 0.05% to about 0.5%. In a most preferred embodiment, the

percentage of inclusion of the amino acid in the liquid may be from about 0.1% to about 0.3%. In order to dilute the liquid amino acids, a relatively simple system is needed, a preferred and non-limiting form of which is illustrated in Figure 1 the drawing.

[0017]Figure 1 The drawing is a schematic block diagram of a preferred embodiment of the present invention. The system of Figure 1 the drawing includes a fluid supply line (2) used in breeding livestock and at least one one-way valve (1) connected to the line (2). The valve (1) prevents the return of amino acids from the fluid distribution system. As shown in Figure 1 the drawing, the system further includes a measurement device (3), such as a flowmeter or litercounter, connected to the line (2) downstream from the one-way valve (1). The system also includes at least one pump (5) for injecting the amino acids into the fluid system, and is equipped with a gradient for regulating the projected flow for the livestock, activated by the measurement device (3). Every time the liquid from the system passes through after it is activated by the animals using one or more drinking troughs (7), it injects a known and anticipated amount of each amino acid in the liquid pipeline. The amino acids are contained in containers such as vats (9, 9'), and are drawn up by appropriate devices (11, 11') and introduced into the flow of liquid towards drinking troughs (7).

Amendments to the Drawing

The label "FIG. 1" has been deleted from the drawing. A Replacement Sheet and an Annotated Sheet Showing Changes are provided.

Remarks

Upon entry of the foregoing amendment, claims 1-22 are pending in the application, with 1 and 11 being the independent claims. As requested in the Decision Granting Petition to Accord a Filing Date to a Nonprovisional Application, Applicants have deleted the label "FIG. 1" from the drawing, as well as references to "Figure 1" in the specification. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Support for the amendments to specification and the drawing is found in the application as originally filed.

Conclusion

Prompt and favorable consideration of this Preliminary Amendment is respectfully requested. Applicant(s) believe the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

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Katrina Y. Pei Quach

Agent for Applicants

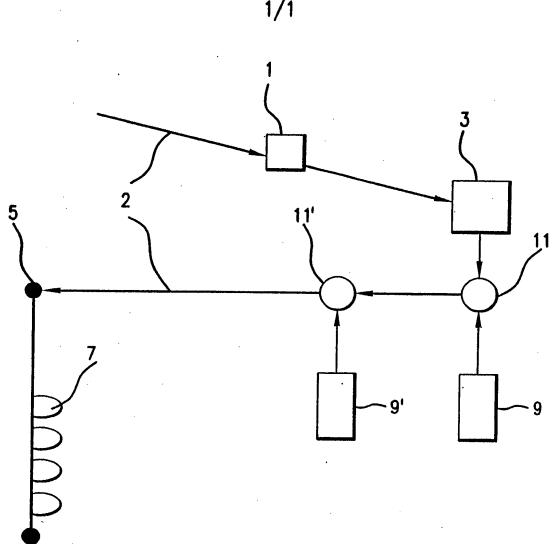
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Date: August 12, 2003

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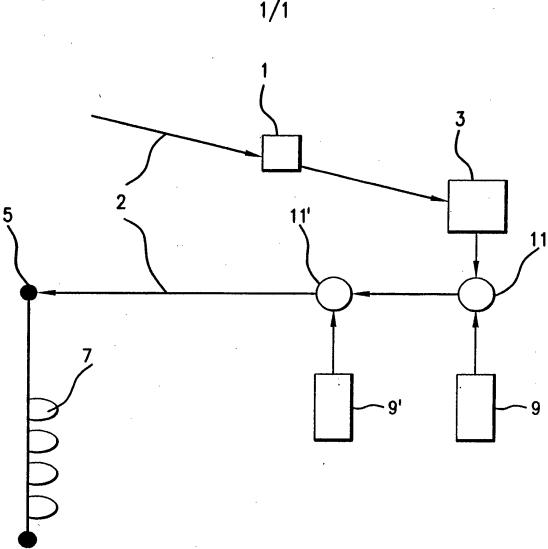


FIG.1 °